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The Robert Schuman Centre

Sorting Out Some EMU Issues

PETER B. KENEN

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Kenen: *Sorting Out Some EMU Issues*

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Introduction

It is a privilege to speak to you today under the auspices of the Schuman Centre, which honors Robert Schuman's contribution to the economic recovery and integration of Western Europe after the Second World War. The Schuman Plan, like the Marshall Plan, deserves to be remembered, not only for what it accomplished economically, but also for what it represented intellectually and politically.

The Marshall Plan committed the United States to the recovery of Europe and fostered on the European side a process of intergovernmental cooperation that was formalized by the creation of the Organization for European Economic Cooperation. It is now known as the Organization for Economic Cooperation and Development and is extending its membership eastward into Central Europe and in other directions as well - to Mexico and, soon, Korea.

The Schuman Plan for Europe's coal and steel industries was, in a sense, more ambitious than the Treaty of Rome, which established the European Economic Community. It envisaged a form of economic integration much more like a single market than a simple customs union.

My talk today will deal with some of the problems confronting Europe as it prepares for another major step in the process of integration - implementing the plan for economic and monetary union (EMU) contained in the Treaty on European Union (TEU). Constraints on your patience and my competence will prevent us from examining all of the issues posed by the plan in the treaty. I will therefore focus on five questions:

- How should the benefits and costs of monetary union be assessed in the present European context?

- How should the governments and institutions of the European Union (EU) apply the provisions of the treaty concerning the selection of eligible countries?

- How should the eligible countries go about locking their exchange rates, given their desire to minimize turbulence in the foreign-exchange market during the transition to monetary union?

• How should other EU countries manage their exchange rates after the monetary union begins?

• How will EMU affect other countries and the international monetary system?

Much has written on these issues recently, and I will cite some of the relevant papers[1]. But we won't take a tour of the academic literature. Instead, I will do what few other academics do - tell you what the treaty says, not what it would have said had it been drafted by clear-minded scholars instead of civil servants and politicians who had to produce an acceptable text by an agreed deadline.

The Benefits and Costs of Monetary Union

The main benefits of a monetary union are those obtained by using a single currency for cross-border trade and investment. The introduction of a single currency eliminates the transactions and accounting costs imposed by the need for currency conversions, and it also eliminates exchange-rate risk. But the gains may be far larger than the savings afforded by banishing these obvious costs and risks. Further gains will derive from "network externalities" that come with the use of a single currency.

The ease of using a single currency should encourage more firms, especially small firms, to participate in cross-border trade, stimulating trade in goods and services. That should raise allocative efficiency by intensifying competition. The introduction of a single currency should also promote cross-border trade in financial assets and thus the volume of transactions on European securities markets. That should reduce transactions costs and should even reduce price volatility[2]. In brief, the move to a single currency can be expected to enhance the benefits conferred by the formation of the single market. A simple

1 More papers and references can be found in Arrowsmith *et al.* (1996a).

2 See Jones and Seguin (1995), who show that reductions in transactions costs have been associated with reductions in the volatility of stock prices.

customs union does not require a monetary union. A full-fledged single market may not work well without one[3].

I often ask American students to contemplate the introduction of currency conversions and exchange-rate fluctuations within the United States. There are twelve Federal Reserve Banks in the United States, which issue their own dollar bills. But those bills exchange at par and are, in any case, fully acceptable throughout the United States. What would happen, however, if the dollar bills issued by the Federal Reserve Bank of Boston could be used only in New England and if the bills of the twelve Federal Reserve Banks were no longer exchangeable at immutably fixed exchange rates? Transactions costs would then impose a non-negligible tax on interregional trade in goods, services, and assets, and there would be exchange-rate risk as well. The resulting segmentation of the single U.S. market could impose large efficiency losses, even after firms and households had adjusted fully to the new regime[4].

The main costs of a monetary union are those identified by the theory of optimum currency areas. They are the costs of giving up monetary autonomy. But discussions of those costs sometimes fail to distinguish between two meanings of monetary autonomy

(i) the freedom to conduct an independent monetary policy, and

(ii) the freedom to use the nominal exchange rate as a policy instrument. Most of the literature uses definition (ii), but let us dwell briefly on definition (i), because its implications are not always recognized.

In a world of high capital mobility, a small country that pegs its exchange rate cannot pursue an independent monetary policy. Even when open interest parity does not hold perfectly, the country's short-term interest rate will be tied closely to foreign interest rates. In different terms, the central bank cannot raise or reduce the stock of base money. When it adds to its domestic assets by, say, an open-market purchase of government securities, it can expect to

3 This view is commonly ascribed to the Commission (1990). More recently, the Commission (1995a) has stressed the costs imposed by large exchange-rate changes between EU currencies - a controversial matter discussed below. Winkler (1996) surveys the relevant literature on the network externalities conferred by the use of a single currency.

4 There would also be effects on the interregional distribution of federal tax and transfer payments, which is why I argued years ago that fiscal domains should not be broader than currency domains; see Kenen (1969).

lose a similar amount of foreign assets (reserves), and there will be no appreciable change in the stock of base money.

The story is slightly different for a large country. When the central bank acquires domestic assets, it will still lose foreign assets, but the loss will not offset fully the increase of domestic assets, and the central bank will have some control over the stock of base money. Such a country may even be able to exercise monetary leadership if it is the largest participant in a particular pegged-rate system. That was true for the United States under the Bretton Woods System and, more recently, for Germany under the European Monetary System (EMS).

If a country - other than the leader - wants to exercise autonomy in this monetary-policy sense, it must allow its exchange rate to float. The central bank can then regulate the stock of base money, because it will not have to intervene on the foreign-exchange market and thus sell foreign assets whenever it acquires domestic assets. Alternatively, it can vary short-term interest rates if it is willing to let market forces determine the nominal exchange rate. It follows, of course, that a country cannot exercise monetary autonomy in the monetary-policy sense without giving up autonomy in the exchange-rate sense.

These propositions are familiar. Why do I repeat them? Because they yield the most compelling argument for monetary union in the present European context: If EU countries want to peg the exchange rates between their currencies, even with broad bands around them, they cannot pursue independent monetary policies. They can have only one monetary policy. But it should be a European policy, not that of any single EU country.

This proposition does not presuppose any difference in policy preferences among EU countries, although it has sometimes been cast in those terms. It arises from the intrinsic difference between the domain of a European monetary policy and the domain of a national policy. The former must encompass the EU countries collectively or, at least, the subset countries that may form a monetary union in 1999; the European Central Bank should aim at maintaining price stability in the EU as a whole, not in any single EU country. A national monetary policy, by contrast, must focus on a single country; the Bundesbank, for example, must maintain price stability within Germany and cannot be expected to take account of economic conditions in other EU countries. The consequences of this difference in domains may not be very noticeable most of the time, but it can be conspicuous and troublesome when economic conditions or policies differ greatly from country to country. That was the case in the early 1990s, when Germany was wrestling with unification and most of its neighbors were wrestling with recessions.

Turning to the exchange-rate definition of monetary autonomy, consider the case discussed by Mundell (1961) when he sought to define an optimum currency area. There are two countries, East and West. Each one produces a single good, using variable amounts of labor and fixed amounts of capital, and both countries consume both goods. The money wage is fixed in each country, labor is fully employed initially, and trade is balanced. Now introduce an *asymmetric* shock - one that affects the two countries differently. Let there be a permanent switch in demand from Eastern to Western goods by consumers in one or both countries. This shock creates unemployment in the East and an excess demand for labor in the West, and the East starts to run a trade deficit with the West.

Conventional demand-management policies, described in the older literature as expenditure-changing policies, cannot correct these imbalances. An increase of Eastern aggregate demand can eliminate unemployment there but will widen the East's trade deficit. A decrease of Eastern aggregate demand can eliminate the trade deficit but will increase Eastern unemployment. To address the two problems simultaneously, the two countries must accept or engineer a change in the real exchange rate betweens their currencies, described in the older literature as an expenditure-switching policy. A fall in the relative price of the Eastern good will raise the demand for the Eastern good by both countries' consumers and will reduce the demand for the Western good. The demand for labor will rise in the East, reducing unemployment, the demand for labor will fall in the West, and trade will move back into balance. When the wage rate is fixed in each country, however, there is only one way to make the requisite change in the real exchange rate - a depreciation or devaluation of the Eastern currency.

Clearly, countries like those in Mundell's model will benefit from monetary autonomy in the exchange-rate sense. Its actual importance, however, will depend on the size, frequency, and persistence of asymmetric shocks, the degree of wage rigidity, and the extent of labor mobility. If the shocks are small, rare, and transitory, there will be little need to change the real exchange rate and thus little need to change the nominal exchange rate. If nominal wages are fairly flexible, a change in labor-market conditions - the advent of excess supply or demand - will produce the necessary changes in the real exchange rate, obviating the need for changes in the nominal rate. If workers move freely from country to country in response to changes in the demand for labor, a shock of the sort we have just considered will not cause long-lasting imbalances in the two countries' labor markets, and labor mobility will also reduce the trade-balance effects of the shock[5].

Much attention has also been paid to the stabilizing role of endogenous fiscal transfers in federal states with large central governments. The fall in Eastern income caused by a switch in demand from Eastern to Western goods will automatically reduce tax payments by Eastern firms and households, cushioning the fall in Eastern disposable income. Conversely, the rise in Western income caused by the switch in demand will raise tax payments by Western firms and households, limiting the rise in Western disposable income. These things will happen whether or not the East and West belong to a federal state. When they do not belong to a federal state, however, the changes in tax payments will show up exclusively in their own governments' budgets. When, instead, they do belong to a federal state, the changes in tax payments will be shifted in part to the federal budget, but the decrease in Eastern payments to the federal government will be partially offset by the increase in Western payments, and there will be little net effect on the federal budget[6].

Economists have used these analytical findings to draw strong conclusions about the advisability of European monetary union - to ascertain whether the EU countries comprise an optimum currency area, or come close enough to that ideal type for them to form a monetary union without having to incur unacceptably high costs. It has been shown, for example, that the so-called core countries of the EU - Germany, France, and their near neighbors - have not suffered asymmetric shocks larger than those experienced by states or regions in the United States, which is the usual benchmark[7]. Therefore, it is said, monetary unification would not be more costly for those countries than for US states and regions. It has also been shown, however, that wage rates are more flexible in the United States and that labor mobility is higher. Therefore, US

5 If Eastern workers took jobs in the West, their demand for Western goods would be transformed from import demand into domestic demand, and their demand for Eastern goods would be transformed from domestic demand into import demand. These transformations would reduce the Eastern trade deficit.

6 A number of studies have sought to measure these fiscal effects in federal states such as Canada and the United States. They are surveyed by Goodhart and Smith (1993), who conclude that endogenous changes in federal fiscal flows - transfers as well as tax payments - offset about 20 percent of a one-dollar fall in output and income.

7 See the survey in Kenen (1995a), ch. 4.

states and regions can adjust more readily to a shock of given size than can EU countries. Furthermore, the size and nature of the EU budget prevent it from serving effectively as a vehicle for income-stabilizing transfers like those that occur endogenously in federal fiscal systems[8].

But most of these considerations are virtually irrelevant to the European case, for one simple reason. Monetary autonomy in the exchange-rate sense is not really valuable unless a country is willing to use it. Conversely, the loss of autonomy suffered when a country joins a monetary union is costly to the country if - and only if - the country would otherwise change its exchange rate when it encountered a large asymmetric shock. Has that been true of Europe? No.

Countries such as the Netherlands have been loath to change their exchange rates because of the belief that a devaluation of the domestic currency cannot have any long-lasting effect on the real exchange rate of a small country; it will be offset by an increase of domestic prices[9]. Larger countries such as France have not wanted to change their exchange rates because of the belief that a fixed exchange rate is the most serviceable anchor for monetary policy and that the government's credibility, broadly defined, depends on the credibility of its commitment to keep the exchange rate from changing. Finally, there is the view, broadly held in Europe, that large exchange-rate changes will be corrosive of the single market and could even undermine the basic customs union - a view to which I will return when discussing exchange-rate arrangements after EMU has begun.

8 Critics of EMU have also argued that, even if Europe can be regarded as an optimum currency area, the initial conditions are wrong. Countries such as Spain, with high unemployment rates, should reduce them before joining a monetary union. See, e.g., George (1996), who does not advise those countries to devalue their currencies to create jobs but believes that "no matter how the unemployment issue is addressed in individual countries, its resolution is bound to have substantial consequences on the whole of the rest of their economies. And ... such changes could well have important implications for the sustainable pattern of real wages and exchange rates within the prospective euro-area." Yet the structural reforms which he favors to reduce unemployment are more likely to strengthen than impair the competitive positions of the countries concerned, whereas the use of beggar-thy-neighbor devaluations to reduce unemployment will increase unemployment in other EU countries, where unemployment rates are also high. No EU country can expect to export unemployment - directly or indirectly - because no other EU country can afford to import it.

9 This argument was invoked by McKinnon (1963) in his critique of Mundell's analysis; a small country, he said, cannot exercise monetary autonomy in the exchange-rate sense, because it has no long-run influence on the real exchange rate.

Deciding on Eligibility

In December 1995, at the Madrid Summit, it was decided that the monetary union will begin 1 January 1999, the final date given in the Maastricht Treaty. It was also decided that the question of eligibility will be resolved in the spring of 1998, as soon as 1987 data on inflation rates, interest rates, and fiscal outcomes become available. The eligibility of each EU country will be decided by qualified majority voting at an extraordinary meeting of the Council of Ministers attended by the heads of state or government. The Council will act "on the basis" of reports prepared by the European Commission and the European Monetary Institute (EMI) and after consultation with the European Parliament. The Council will assess a particular country "fulfils the necessary conditions for the adoption of a single currency"[10]. If a country is found to be eligible, it will enter the monetary union automatically, willing or not (but Denmark and the United Kingdom may choose to opt out).

The reports of the Commission and EMI will assess "progress made in the fulfilment by the Member States of their obligations regarding the achievement of economic and monetary union," including the compatibility of each country's legislation and central bank statute with the requirements of the treaty. The reports will also examine "the achievement of a high degree of sustainable convergence" by applying the so-called convergence criteria:

- the achievement of a high degree of price stability; this will be apparent from a rate of inflation which is close to that of, at most, the three best performing Member States in terms of price stability;

- the sustainability of the government financial position; this will be apparent from having achieved a government budgetary position without a deficit that is excessive as determined in accordance with Article 104c(6).

- the observance of the normal fluctuation margins provided for by the exchange-rate mechanism of the European Monetary System, for at least two years, without devaluing against the currency of any other Member State;

10 TEU, Article 109j; unless otherwise indicated, all quotations in this section are from that same article.

- the durability of convergence achieved by the Member State and of its participation in the exchange-rate mechanism of the European Monetary System being reflected in the long-term interest-rate levels.

The reports will also "take account of the development of the ecu, the results of the integration of markets, the situation and development of the balances of payments on current account and an examination of the development of unit labor costs and other price indices."

A protocol to the Maastricht Treaty defines the convergence criteria more precisely. In the year preceding the assessment, a country's inflation rate must not exceed by more than 1½ percentage points the inflation rate of the three best performing countries, and its long-term interest rate must not exceed by more than 200 basis points the interest rate of those same countries. But the protocol does not resolve an important ambiguity in the exchange-rate criterion. When the treaty was drafted, the "normal" fluctuation margins of the EMS were 21/4 percent on each side of the central rate. The term "normal" was used to distinguish those margins from the 6 percent margins employed by new entrants to the exchange-rate mechanism. In August 1993, however, the margins were widened "temporarily" to 15 percent on each side of the central rate. Yet there has been no formal decision to treat those wide margins as the "normal" margins, though that is quite likely to happen.

Most of the EU countries are expected to satisfy the inflation-rate and interest-rate criteria. Five countries do not now participate in the exchange-rate mechanism - Finland, Greece, Italy, Sweden, and the United Kingdom. But the Verona meeting of the Ecofin Council apparently agreed that those countries will be deemed to satisfy the two-year rule in the exchange-rate criterion if they begin to participate before the end of 1996[11].

The fiscal criterion represents a more difficult obstacle, because most of the EU countries are running large budget deficits. Furthermore, the procedures set out in the treaty pose several problems. Under Article 104c of the treaty, the Commission must assess adherence to fiscal discipline by applying two tests:

11 The Ecofin Council is the term used to identify meetings of the Council of Ministers attended by Ministers of Finance or Economics. As the Verona meeting was "informal," it could not take binding decisions.

(a) whether the ratio of the planned or actual government deficit to gross domestic product exceeds a reference value [3 percent], unless

- either the ratio has declined substantially and continuously and reached a level that comes close to the reference value;

- or, alternatively, the excess over the reference value is only exceptional and temporary and the ratio remains close to the reference value;

(b) whether the ratio of government debt to gross domestic product exceeds a reference value [60 percent], unless the ratio is sufficiently diminishing and approaching the reference value at a satisfactory pace.

If the Commission finds that a country has an excessive deficit, using these tests, it must make a report to the Council of Ministers, which will then decide formally whether the country has an excessive deficit. Once a country is found to have an excessive deficit, the finding remains in force until the Council, acting on a recommendation by the Commission, abrogates the finding.

When this process was followed initially in 1993, the Commission submitted reports on 10 of the 12 EU countries, and the Council decided formally that those countries had excessive budget deficits. The Commission did not file a report on Luxembourg, which met both tests. It did not file a report on Ireland, although Ireland's debt was much larger than 60 percent of GDP, because Ireland's debt ratio had been falling for several years and its deficit was below 3 percent of GDP. Four observations are relevant here:

(1) There is an asymmetry lurking in Article 104c. As in the Irish case, the Commission can 'shelter' a country from an adverse finding by the Council merely by declining to file a report, but the Commission must make a positive recommendation before the Council can abrogate an adverse finding. Furthermore, the Council does not have to accept the Commission's recommendation. In June 1996, however, the Council abrogated its earlier decision on Denmark, for reasons like those given by the Commission in 1993, when it declined to file an adverse report on Ireland. Denmark's budget deficit is below 3 percent of GNP, and its debt ratio has been falling for the last few years. Hence, the Council may not take a tougher line than the Commission, and the formal asymmetry in the treaty may not matter very much.

(2) When preparing their reports on eligibility, the Commission and EMI cannot really decide for themselves whether a country has an excessive deficit. They must ask whether the Council has decided that the country has an excessive deficit and whether the decision remains in force. (Nevertheless, the EMI has already said that it will conduct its own assessment of compliance with all four convergence criterion. It is presumably determined to make sure that the criteria will be applied strictly, not bent by political considerations.)

(3) If the Council adheres strictly to the Maastricht Treaty, it must follow a two-step procedure in 1998. It must first decide whether to abrogate adverse findings already made under Article 104c. Until that has been done, the Commission and EMI cannot prepare their reports on eligibility and the Council cannot decide which countries meet the "necessary conditions for the adoption of a single currency."

(4) When it ratified the Maastricht Treaty, the Bundestag declared that it would conduct its own assessment of eligibility, and it called on the German government to insist on a "strict" interpretation of the convergence criteria. Furthermore, the German government has recently proposed that countries joining the monetary union agree to a so-called stability pact, which would bind them to pursue even tighter fiscal policies than those required by the treaty. Hence, the Council of Ministers may be compelled to apply a strict interpretation of the two tests defining an excessive deficit and to give little weight, if any, to the qualifying phrases in the treaty. To do otherwise would create an unacceptable precedent, even if, as now seems likely, there will be no formal stability pact.

The Commission's fiscal forecasts, shown in Table 1, suggest that very few countries will pass the two fiscal tests if they are interpreted strictly - and the forecasts themselves may be optimistic. Seven countries are expected to have budget deficits no larger than 3 percent of GDP, but only two of them, France and Luxembourg, are expected to have debt ratios no larger than 60 percent of GDP. The rest of the low-deficit countries, however, are expected to have debt ratios below 80 percent of GDP, and it may be hard for the Council of Ministers to treat them differently[12]. But two more countries, Austria and Sweden,

12 Two of them (Denmark and Ireland) are not now subject to an excessive-deficit finding under Article 104c. Finland and Germany are expected to have debt ratios very close to 60 percent, although their ratios will have been rising. The Netherlands, usually seen as one the strongest candidates for EMU, is expected to have a higher debt ratio than any other low-deficit country.

are expected to have budget deficits very close to 3 percent of GDP, and their debt ratios are not projected to be much higher than that of the Netherlands.

There has been no shortage of proposals to ease or interpret the two fiscal tests in ways that would raise the number of eligible countries, but the figures in Table 1 warn us against using them, even if they were politically acceptable.

Not long ago, for example, I suggested that the Maastricht Treaty be amended so as to use the debt ratio as a criterion for applying the deficit test, not as a separate test. A country with a debt ratio no larger than 60 percent of GDP would be required to run a budget deficit no larger than 3 percent of GDP, but one with a higher debt ratio would be required to run a budget deficit no larger than 2 percent; see Kenen (1995a,b)[13]. But the Commission's forecasts show that none of the high-debt countries could come close to meeting my test. More recently, Gros (1996) proposed that a country's debt ratio be regarded as "approaching the reference value at a satisfactory pace" if, over the three most recent years, the ratio has been declining continuously and the cumulative reduction has been no smaller than 15 percent of the difference between the initial debt ratio and the reference value. Of the 12 countries projected to have high debt ratios in 1997, however, only four (Belgium, Denmark, Ireland, and Italy) can be expected to show "continuous" reductions between 1994 and 1997, and only one of them (Ireland) can be expected to cut its debt ratio by as much as 15 percent of the initial gap.

It would still be possible, however, for the Commission and EMI to find that some countries which had excessive deficits in 1997 have come quite close to meeting the two fiscal tests and have met the other convergence criteria. It is worth noting, moreover, that the Maastricht Treaty does not require every EU country to meet all four criteria. *In fact, the treaty does not even say that those four criteria are the "necessary conditions" which countries must fulfil in order to enter the monetary union.*

13 But my proposal could also be used as a way to interpret Article 104c, not as an amendment to it; a country having a budget deficit lower than 2 percent of GDP could be expected to experience a gradual reduction in its debt ratio. It has been widely noted that a country with a budget deficit no larger than 3 percent of GDP and a growth rate of nominal GDP no smaller than 5 percent per year will experience a gradual reduction in its debt ratio; in fact, the debt ratio will approach 60 percent asymptotically if the deficit is exactly 3 percent and the growth rate is exactly 5 percent. (To achieve the latter, however, without having an inflation rate higher than 3 percent, the country's *real* GDP must grow by no less than 2 percent.)

Table 1: Budget Deficits and Debts of EU Countries as Percentages of Gross Domestic Product
(actual data for 1994-95 and projections for 1996-97)

	Deficits			Debts			
Country	1995	1996	1997	1994	1995	1996	1997
Austria	6.2	4.6	3.1	65.0	69.4	72.4	73.9
Belgium	4.5	3.2	3.7	136.0	133.7	132.2	130.6
Denmark	1.4	0.9	0.6	76.0	71.9	71.0	68.7
Finland	5.6	3.3	1.6	59.8	59.6	62.5	63.2
France	5.0	4.2	3.0	48.4	52.4	56.1	57.8
Germany	3.5	3.9	2.9	50.4	58.1	61.5	62.4
Greece	9.2	8.1	6.9	110.4	111.5	111.8	111.4
Ireland	2.4	2.0	1.5	91.1	85.5	81.3	77.3
Italy	7.1	6.3	5.2	125.6	124.8	124.5	122.8
Luxembourg	-0.3	-0.7	-0.3	5.9	6.9	6.2	6.8
Netherlands	3.4	3.5	2.9	77.6	79.0	79.4	78.7
Portugal	5.4	4.4	3.7	70.0	71.6	72.2	71.8
Spain	6.2	4.8	3.7	63.1	65.7	67.8	68.0
Sweden	8.1	5.2	3.1	79.3	79.9	80.8	79.6
United Kingdom	6.0	4.4	3.7	50.3	54.0	55.5	56.2

Source: European Commission, *The Community Economy in 1996-97: Spring 1996 Economic Forecasts*; Brussels, May 15, 1996. The forecasts for 1996-97 take account of policy measures announced in April and early May by the German, French, Austrian, and Swedish governments and supplementary measures for 1996 announced in early May by the Belgian and Spanish governments. They do not make allowance for measures announced thereafter.

Locking the Participants' Exchange Rates

No country seeking to satisfy the exchange-rate criterion may devalue its currency during the two years before the day in 1998 when the Council will choose the eligible countries. But no such constraint exists thereafter, from that day until 1 January 1999, when the participating countries will decide unanimously on the matrix of exchange rates at which they will enter the monetary union and the corresponding conversion rates between their currencies and the euro - the currency of the monetary union. Hence, a country can devalue its currency to gain a competitive advantage or reduce the real value of its government debt[14]. This possibility has led to much concern about the risk of speculative attacks on the currencies of countries likely to undertake one last devaluation.

Several proposals have been made to deal with this risk, but some of them come into conflict with three other requirements: (1) The Maastricht Treaty says that the locking of exchange rates must not affect the external value of the ECU; i.e., there must be no 'jump' in the value of the ECU basket expressed in non-EU currencies. (2) The treaty also rules out any change in the currency weights that define the ECU basket. (3) The Madrid Summit decided that the euro and ECU must be exchangeable on a one-for-one basis at the start of the monetary union.

How do these provisions constrain the locking of exchange rates? Suppose that the countries chosen to enter the monetary union announced on 30 June 1998 that one euro will equal one deutsche mark on 1 January 1999 and that the euro values of the other participants' national currencies will equal the deutsche mark values of those currencies implied by the central rates obtaining on 30 June 1998. This would almost certainly cause a jump the value of the ECU on 1 January 1999, for three reasons: (a) the market values of the participants' currencies will not necessarily equal their central rates in terms of the deutsche mark on 1 January 1999; (b) the market values of the participants' currencies multiplied by their fixed weights in the ECU basket are not likely

14 De Grauwe points out, however, that the need for unanimous agreement on the locking of exchange rates may effectively preclude unilateral exchange-rate changes in the period before the actual locking; a government that devalues its runs the risk that its partners will force it to rescind the devaluation before they will approve the locking of exchange rates; see De Grauwe's contribution in Arrowsmith *et al.* (1996). For further discussion of the issues raised in this section, see Arrowsmith's own contribution; also Arrowsmith (1996), Spaventa (1996), and Taylor (1995).

to equal one deutsche mark on 1 January 1999; and (c) the value of the ECU basket will depend in part on the values of the nonparticipants' currencies, such as the pound, that are included in the ECU basket (and cannot be excluded because there can be no change in the composition of the basket).

Alternatively, the participants might announce that the value of the euro on 1 January 1999 will equal the actual market value of the ECU on 30 June 1998 and that the euro values of the participants' currencies will equal their actual ECU values on that same date. This would reduce the likelihood of a large gap between the value of the euro and the value of the ECU on the eve of the actual locking of exchange rates; the value of the euro would not be fixed arbitrarily in terms of the deutsche mark. But it would not solve the other problems listed above; the market values of the participants' currencies on 1 January 1999 will not necessarily equal their market values on 30 June 1998, and the value of the ECU will still be affected by the values of the nonparticipants' currencies.

There is only one way to satisfy the requirements of the treaty and the Madrid decision, taken together. The locking of exchange rates on 1 January 1999 must take place at the exchange rates actually prevailing just before the locking occurs. But this conclusion does not necessarily imply that governments must let market forces decide matters for them. They may not be able to choose in advance the conversion rates between their national currencies and the euro, but they may still be able to choose the exchange rates at which they will enter the monetary union - and those are more important for the countries themselves and for the behavior of the foreign-exchange market.

The risk of turmoil in the foreign-exchange market does not arise from the possibility of changes in the ECU or euro values of the participants' currencies in the run-up to the locking of exchange rates. It arises from the possibility of changes in the matrix of exchange rates between those currencies. It should thus seem possible to minimize that risk by declaring in advance, as soon as the eligible countries are chosen, that the locking of exchange rates will occur at a matrix of rates defined by the then-current central rates (with or without a realignment to be announced on that same day). Alternatively, the declaration might say that the locking will occur at a matrix of rates defined by the average of actual exchange rates in the second half of 1998 or some part of that period.

If deemed to be credible, such a declaration would cause market exchange rates to converge on the chosen rates - whether based on central rates or on average market rates - and would rule out a "jump" in the value of the ECU on 1 January 1999. The credibility of the declaration would, of course, be greatly enhanced if the participants' central banks announced simultaneously that they would engage in unlimited intervention to keep exchange rates within their bands during the months between the declaration and the locking of exchange rates.

This strategy has one disadvantage. No one could know in advance the euro values of the participants' currencies, because these would depend on the value of the ECU on 1 January 1999, and it would still depend in part on the values of the nonparticipants' currencies. But that should not interfere seriously with preparations for the monetary union. Banks and others could revise their computer programs in advance but allow for last-minute insertion of the conversion rates between the euro and the national currencies. It should be noted, moreover, that private institutions will not have to do business in euro on the first day of the monetary union[15].

Concerns have been expressed about the possibility of speculative crises even after exchange rates have been locked (i.e., in the three years before the national currencies are replaced completely by the euro). This concern is based on a misunderstanding. The locked exchange rates will not be 'defended' by intervention on the foreign-exchange market. Article 52 of the Statute of the ECB requires the national central banks to buy and sell the participants' currencies at their par values. In other words, there will be what I have called over-the-counter convertibility (Kenen, 1995a).

The implications can be described by asking what would happen if, in the United States, residents of the Third Federal Reserve District came to believe that the Philadelphia dollar might be devalued against the New York dollar. They would swap Philadelphia dollars for New York dollars; the Philadelphia dollars would find their way to the New York Federal Reserve Bank; and the Philadelphia Federal Reserve Bank would then redeem them by transferring U.S. government securities to the New York Fed by way of an obscure institution known as the Interdistrict Settlement Fund.

15 Under the plan proposed by the EMI and endorsed by the Madrid Summit, the ECB and national central banks would adopt the euro immediately and use it in their money-market and foreign-exchange operations. Therefore, commercial banks would have to conduct most of their 'wholesale' business in euro. For more on these matters, see EMI (1995a).

Returning to Europe, suppose that holders of French francs began to sell them for deutsche mark. The Bundesbank would 'print' the marks it needed to buy up the francs, and the Banque de France would buy back the francs by transferring franc-denominated assets to the Bundesbank *via* the ECB. The Bundesbank could not refuse to accept the franc-denominated assets if instructed to accept them by the ECB. In effect, the national central banks would be obliged to extend unlimited amounts of short-term credit to their partners and then to accept settlement in the assets ordinarily held by their partners. The Bundesbank would have no reason for concern about the money-supply effects of the switch from francs to marks, as it would not affect the money supply in the monetary union as a whole - and that would be the only relevant monetary aggregate[16].

Linking the Insiders and Outsiders

When the Maastricht Treaty was drafted, little attention was paid to the possible need for an exchange-rate arrangement to link the currencies of the participants (insiders) and the nonparticipants (outsiders). In fact, the treaty contains only one explicit reference to the problem. Outsiders are instructed to treat their exchange-rate policies as a matter of concern to all EU countries and to "take account of the experience acquired in cooperation within the framework of the European Monetary System" (TEU, Article 109m). The issue has come to the fore, however, for three reasons. First, there will be more outsiders than had been expected when the treaty was drafted. Second, late entrants to the monetary union will have to satisfy some sort of exchange-rate criterion, and doubts have been expressed about their ability to do that without help from the ECB in the framework of a formal exchange-rate arrangement[17]. Third, the floating of the pound and lira in 1992 and their subsequent

16 These examples are drawn from Kenen (1995a) and De Grauwe's contribution to Arrowsmith *et al.* (1996); see also Arrowsmith (1996).

17 In Kenen (1995a), I argued that a formal arrangement was not necessary for this purpose, citing the case of Austria, which kept its currency tied tightly to the deutsche mark for many years without being a member of the EMS. But De Grauwe (1995) and others have argued persuasively that an outsider, having failed to qualify for the monetary union, could have trouble maintaining exchange-rate stability without help from a formal exchange-rate arrangement. Going further, De Grauwe and Gros (1996) both argue that an outsider *must* maintain exchange-rate stability to reduce its interest rates and thus reduce the cost of servicing its government's debt; otherwise, it will have trouble meeting the fiscal convergence criterion. The Commission (1995b) has argued that Article 109m,

depreciation, especially that of the lira, inspired charges of "exchange-rate dumping" and fears that the integrity of the single market could be jeopardized by large exchange-rate fluctuations.

Most economists, I said before, deny that a single market needs a single currency. And I agreed, although I said that the U.S. monetary union probably makes a significant contribution to the efficiency of the U.S. economy. Yet large exchange-rate fluctuations could still jeopardize the European single market by producing political tensions and pressures - especially pressures on national governments to subsidize or otherwise protect covertly the industries adversely affected by exchange-rate fluctuations. Eichengreen put the point neatly in his recent Graham Lecture at Princeton:

The corrosive effect of currency fluctuations was clearly evident in the wake of the 1992 depreciation of the lira. The lira's decline caused a sharp depreciation of Italy's real exchange rate and an appreciation of those of France and Germany. Given Europe's increas-ingly integrated market, this boosted Italian exports, strengthened the current account, and helped to moderate the recession in Italy. But the repercussions abroad were strongly negative. The EU Commis-sioner for the Internal Market, Mario Monti, warned of "growing concern among industrialists that the lira's devaluation in giving Italian companies an advantage over their European competitors ..." (Eichengreen, 1996).

As a matter of fact, the French and German governments demanded that Brussels grant subsidies to the impacted industries.

There is now widespread support in Europe for a successor to the EMS, and the Ecofin Council endorsed the idea in principle at its Verona meeting. But the new arrangement, already known as EMS II, is apt to differ greatly from the EMS. Four sets of issues must be resolved.

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combined with the need for outsiders to meet an exchange-rate criterion, implies that there must be a formal exchange-rate arrangement after the monetary union begins. But the need for an outsider to meet an exchange-rate criterion could be satisfied merely by requiring that it maintain a stable exchange rate on its own; the criterion need not take the same form as the one in Article 109j, which refers explicitly to the EMS. The price-stability criterion, for example, will probably be recast after the monetary union begins; instead of having an inflation rate that is not more than 1½ percentage points above that of the three best-performing countries, a candidate for late entry to the union may be required to have an inflation rate that does not greatly exceed the average rate within the union.

Governance. The Council of Ministers established the EMS, and its operating procedures were then defined by an agreement among the central banks, which also managed the short-term credit facilities of the EMS (a task that has been shifted to the EMI). Under the Maastricht Treaty, however, the Council of Ministers is not empowered to regulate relations between the euro and other EU currencies. Article 109 gives it certain powers in respect of relations between the euro and non-EU currencies but does not even mention other EU currencies.

An EMS II could be established by an agreement or set of agreements between the ECB and the outsiders' central banks. But governments may not be willing to let central banks decide exchange-rate realignments on their own. And they may insist on a role for the Council of Ministers if, as seems likely, access to the credit facilities of an EMS II will depend on a country's progress in meeting the various convergence criteria. Judgments on that score should presumably be made by the Council, not by the central banks.

Central Rates and Bands. Under the present EMS, a member's obligations are defined by the grid of bilateral parities linking its currency to every other currency. The parities are obtained from each currency's central rate in terms of the ECU, and they in turn define the band for each bilateral exchange rate. When any bilateral rate reaches the edge of its band, both countries involved must intervene to prevent the rate from moving further (and the strong-currency country is also required to lend its currency to the weak-currency country in order to finance intervention by the weak-currency country).

Under EMS II, the central rates and bands will probably be defined in terms of the euro, not a bilateral grid. But objections have been raised because this arrangement would allow large fluctuations in bilateral rates between outsiders' currencies. (With a 15 percent band on each side of a currency's central rate defined in terms of the euro, the exchange rate between two outsiders' currencies could change by as much as 60 percent if one currency moved from the top to the bottom of its euro band and the other currency did the opposite.)

It would, of course, be possible for two outsiders to adopt a narrower band for their bilateral rate, but they might then be required to defend it on their own, without recourse to the credit facilities of EMS II. It would, in fact, be possible for each outsider to choose its own euro band with the ECB's approval, and thus for two outsiders to choose euro bands that prevented wide fluctuations in the exchange rate between their currencies.

It has also been suggested that outsiders far from meeting the convergence criteria should be allowed or required to adopt wider-than-average euro bands to limit the need for the ECB to defend those currencies. The bands would then be narrowed as the countries came closer to meeting the convergence criteria[18].

Intervention Obligations. Under the present EMS, central banks have open-ended intervention obligations. But those of the most important central bank were actually limited from the start. In 1979, the President of the Bundesbank, Otmar Emminger, wrote to the German Minister of Finance, drawing attention to the risk that mandatory intervention might undermine the Bundesbank's monetary policy and proposing two remedies in case of a conflict between the Bundesbank's obligations under the EMS and its obligation to maintain domestic monetary stability. (1) The Bundesbank could ask the German government to seek an exchange-rate realignment. (2) If the government was unable to obtain a realignment, the Bundesbank would be relieved of its obligations under the EMS and could cease to intervene. The Minister of Finance agreed to these terms by declaring in the Bundestag that the Bundesbank would intervene whenever intervention was appropriate[19].

It was at first believed that the Bundesbank would successfully oppose any exchange-rate arrangement under which it would have to intervene in support of an outsider's currency - and that was my own forecast (Kenen, 1995a). Shortly before the Verona meeting, however, a Franco-German meeting of finance ministers and central bank governors agreed that an EMS II would not

18 Carrying this theme further, Gros (1996) and Thygesen (1996) suggest that countries close to meeting the convergence criteria might elect to maintain the strictest type of exchange-rate stability by converting their central banks into currency boards. In effect, they would import the monetary policy of the ECB by fixing their euro exchange rates and defending those fixed rates by nonsterilized intervention. Gros goes on to suggest that such countries should be admitted to "associate status" in the monetary union. They would not merely import the ECB's monetary policy but would also adopt all of its regulations and participate in the payment system of the monetary union. But their central bank governors would not be allowed to vote in the Governing Council of the ECB. Gros believes that associate status would enhance the credibility of a country's commitment to a fixed exchange rate, allow it to enjoy lower interest rates, and thus help it to meet the fiscal convergence criterion. Such a country, however, could not expect to be included in the policy domain of the ECB and, unlike a full member of the monetary union, could not expect the ECB to buy domestic assets from its central bank in order to settle imbalances in the payment system. The costs of associate status might therefore exceed the benefits.

19 On the text and subsequent history of the so-called Emminger letter, see Eichengreen and Wyplosz (1993).

be credible without some such commitment by the ECB, and two proposals have been discussed.

The first, already mentioned, would set up conditional line of credit for the outsiders' central banks; they would be able to borrow euros from the ECB if their countries were making satisfactory progress in meeting agreed targets, to be defined in terms of the convergence criteria. The second, favored by the EMI, would incorporate the provisions of the so-called Emminger letter into the EMS II agreement. The ECB would be entitled to request an exchange-rate realignment (even, perhaps, the right to require one) if, in its view, it could not support an outsider's currency without jeopardizing its commitment to price stability; see EMI (1996).

The Case of the Unwilling Outsider. The British government has already said that it will not participate in an EMS II, and it is therefore adamantly opposed to any plan that would require all EU countries to join or would penalize those that refused. It has suggested instead that the outsiders achieve exchange-rate stability by adopting inflation targets consistent with the target chosen by the ECB[20]. As a consequence, the Verona meeting agreed reluctantly that membership in EMS II would be voluntary. Some governments, however, still want to find ways of achieving exchange-rate stability within the entire EU, by imposing a general commitment to exchange-rate stability on every EU country and, perhaps, imposing sanctions on a country that refuses to endorse that commitment.

EMU and the Outside World

Three questions are frequently raised about the effects of EMU on other countries and on the international monetary system:

• Will the fiscal consolidation required for EU countries to meet the convergence criteria depress economic activity in Europe enough to reduce it in other countries or slow the growth of world trade?

20 A similar proposal has been made by Persson and Tabellini (1996).

• How will the advent of the euro affect the role of the dollar as an international currency?

• Will the EU be able and willing to participate effectively in the collaborative work of the G-7 and other international bodies?

I will address each of them briefly.

Effects of Fiscal Consolidation. With the exception of the United Kingdom, which is not expected to join the monetary union in 1999, every major EU country has undertaken reduce its budget deficit in an effort meet the fiscal tests set out in the Maastricht Treaty. This synchronized effort is worrisome. First, it is likely to reduce aggregate demand in the EU as a whole, adversely affecting output and employment and, in the process, making it harder for each country to reduce its own budget deficit. Second, it may adversely affect Europe's trading partners, including countries in central and eastern Europe. Fiscal consolidation is, of course, necessary in most EU countries, even those that do not have big deficits or debts, to prepare for the large demographic changes they will face in the decades ahead. But the 1999 deadline has forced too many countries to move too fast.

The Commission (1996) remains optimistic about the near-term prospects for economic activity in Europe; it cites the recent appreciation of the dollar, an improvement in the profitability of investment, and easier monetary policies in Europe as reasons for believing that economic activity will rebound in the second half of 1996, and lower budget deficits will be helpful, not harmful, because they will reduce long-term interest rates. And other institutions, including the EMI (1995b) have taken the same view. The EMI acknowledges, however, that this output-increasing effect will not materialize swiftly if announcements of fiscal-policy changes are not fully credible, and there are reasons for doubt on that score. How many times have we been told that a package of policy changes will reduce a country's budget deficit to 3 percent of GDP in 1997, only to be told a few months later that the next package will do the trick?

The problem cannot be solved by postponing the start of the monetary union for one or two years. A delay to buy additional time for fiscal consolidation would surely reduce the credibility of subsequent fiscal-policy changes, and any delay would have grave economic and political consequences.

For the first time since the 1992 EMS crisis, many Europeans have begun to believe that the monetary union will actually start in 1999, even if the EU will be forced to find ways around some of the obstacles in the treaty. Banks and other private institutions have begun to make the expensive investments required to shift to the euro soon after 1999. Expectations about future eligibility are being reflected in long-term interest rates. And the German recent elections have suggested that running against EMU may not be a promising political strategy, even in Germany. But the tide would turn quickly in the opposite direction at the first sign of a change in the schedule. There is, I believe, only one way to minimize the down-side risks of fiscal consolidation - a further easing of German monetary policy to allow an easing of other countries' policies.

Effects on the International Monetary System. Although the dollar is still the most important currency in the international monetary system, its relative importance has diminished gradually, and the advent of the euro will accelerate that process. How and why?

Let me start with some things that will *not* happen. A few years ago, the Commission (1990) predicted that EU countries would have excess foreign-exchange reserves once the monetary union had begun, because they would no longer need reserves for EMS intervention. It said that they would want to run down their reserves. But currencies such as the deutsche mark will not 'count' as reserves for EU countries, as they will become euro-denominated domestic assets, and this transformation by itself will greatly reduce EU reserves[21]. Furthermore, the EU countries are not likely to injure themselves by selling surplus dollars and thus causing the dollar to depreciate against the euro. They will hold onto those, as as they have no attractive alternative. It has also been suggested that there will be a sharp shift into euros by European and other investors. That is not likely to happen, if only because the euro will not automatically inherit the reputation of the deutsche mark. In fact, there could be a shift in the opposite direction.

In the longer run, however, euro-denominated assets will attract European and other investors, and the euro will probably be a strong currency, especially if the ECB attempts to establish its own credibility by adopting a fairly tight monetary policy. In addition, the substitution of the euro for the deutsche

21 The deutsche mark holdings of EU countries probably account for about 20 percent of EU foreign-exchange reserves and for about 25 percent of the currency reserves of EU countries other than Germany.

mark and other EU currencies will reduce the number of currencies traded on foreign-exchange markets, and the volume of trading in the euro will come quickly to exceed the combined volume of trading in its predecessors. One would therefore predict a reduction in transactions costs and, as a result, a change in the conduct of trading. Dealers will have less incentive to use the dollar as the vehicle currency when moving between two other currencies (i.e., to move from euros to pesos by selling euros for dollars and then selling dollars for pesos). A contraction in the vehicle role of the dollar could, in turn, reduce its use as an intervention currency and, therefore, its role as a reserve currency.

Effects on International Monetary Cooperation. Under Article 109 of the Maastricht Treaty, the Council of Ministers, the Commission, and the ECB will all be involved in the making of EU exchange-rate policy *vis-à-vis* foreign currencies and in the making of other policies having particular relevance for EMU. Article 109 is meant to make sure that the EU "speaks with one voice" when addressing the rest of the world, but it suffers from a troublesome combination of negotiated ambiguity and bad drafting. It is incomplete and internally inconsistent. This is what it says:

1. By way of derogation from Article 228, the Council may, acting unanimously on a recommendation from the ECB or from the Commis-sion, and after consulting the ECB in an endeavour to reach a consensus consistent with the objective of price stability, after consulting the European Parliament, in accordance with the pro-cedure in paragraph 3 for determining the arrangements, conclude formal agreements on an exchange-rate system for the ECU in rela-tion to non-Community currencies. The Council may, acting by a qualified majority on a recommendation from the ECB or from the Commission, and after consulting the ECB in an endeavour to reach a consensus consisting with the objective of price stability, adopt, adjust or abandon the central rates of the ECU within the exchange-rate system. The President of the Council shall inform the European Parliament of the adoption, adjustment or abandon-ment of the ECU central rates.

2. In the absence of an exchange-rate system in relation to one or more non-Community currencies as referred to in paragraph 1, the Council, acting by a qualified majority either on a recommenda-tion from the Commission and after consulting the ECB or on a recommendation from the ECB, may formulate general orientations for exchange-rate policy in relation to these curren-

cies. These general orientations shall be without prejudice to the primary objective of the ECB to maintain price stability.

3. By way of derogation from Article 228, where agreements con-cerning monetary or foreign-exchange regime matters need to be negotiated by the Community with one or more States or inter-national organizations, the Council, acting by a qualified major-ity or on a recommendation from the Commission and after consult-ing the ECB, shall decide the arrangements for the negotiation and for the conclusion of such agreements. These arrangements shall ensure that the Community expresses a single position. The Com-mission shall be fully associated with the negotiations.

Agreements concluded in accordance with this paragraph shall be binding on the institutions of the Community, on the ECB and on Member States.

4. Subject to paragraph 1, the Council shall, on a proposal from the Commission and after consulting the ECB, acting by a quali-fied majority decide on the position of the Community at inter-national level as regards issues of particular relevance to economic and monetary union and, acting unanimously, decide its representation in compliance with the allocation of powers laid down in Articles 103 and 105.

5. Without prejudice to Community competence and Community agreements as regards economic and monetary union, Member States may negotiate in international bodies and conclude international agreements.

This article went through many drafts. Some governments sought to make sure that the Council could not force the ECB to intervene on foreign-exchange markets in a manner inconsistent with the pursuit of price stability. Other governments sought to make sure that national governments would retain firm control over the EU's exchange-rate policy. Even now, the wording is cumbersome, partly because we have no agreed language for describing the existing exchange-rate regime. The term "regime" does not even appear in Article IV of the Articles of Agreement of the International Monetary Fund, which speaks of the "monetary system" and the exchange-rate "arrangements" of members (and then speaks of a "system of exchange arrangements").

The meaning of paragraph 1 is fairly clearly. It defines the procedure that must be followed before the EU can agree to a binding agreement like that of the Bretton Woods system, which would fix the external value of the ECU.

The second paragraph is clear on some points but not on others. The EU cannot make informal agreements affecting the external value of the euro unless those agreements are fully compatible with price stability. But the text does not say who will judge that - or how.

The article as a whole, moreover, does not state clearly how the EU will participate in international discussions, such as those of the G-7 countries, about exchange-rate management, Paragraph 3, on negotiations about exchange-rate policy, cannot apply. First, it is cited in paragraph 1 but not in paragraph 2. Second, the final sentence of paragraph 3, on the binding nature of exchange-rate agreements, clashes with the careful language of paragraph 2, which speaks only of "general orientations" and can even be read to say that the ECB will decide for itself whether those "general orientations" are consistent with the pursuit of price stability. We are thus left with paragraph 4, concerning EU positions and representation on issues of "particular relevance" to EMU, but that paragraph says nothing whatsoever about exchange rates or the role of the Commission[22].

Henning (1996) has urged the United States and other countries to ask how and when the EU governments will resolve the many questions raised by Article 109. Will there be rotating representation in international bodies such as the G-7 and G-10, as the Presidency of the Council passes semiannually from one EU country to another? What will happen when the Presidency is held by a government that is not a member of the G-7 or G-10? After France, Germany, and Italy have joined the monetary union, will they be represented separately when G-7 ministers or deputies discuss economic policies broadly and then represented collectively when the conversation turns to exchange-rate policy? But we are not likely to get answers soon - not before the 1998 decisions on participation in the monetary union.

22 Curiously, the paragraph says that the matter of representation will be decided by unanimity, but matters of substance will be decided by qualified majority voting.

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